

Form PTO-1449		
ATTY DOCKET NO. 63-03	SERIAL NO. 10/717,218	FILING DATE November 19, 2003
APPLICANT Roark et al.		GROUP 1724

APR 23 2004

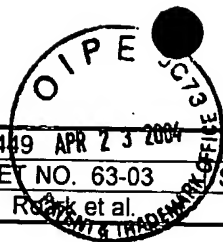
U.S. PATENT DOCUMENTS

Exmr. Initial	Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
RB	2,324,620	02/25/58	De Rosset	183	2	
RB	2,958,391	11/01/60	De Rosset	183	2	
RB	3,350,846	11/07/67	Makrides, et al	55	16	
RB	3,393,098	07/16/68	Hartner et al.	136	86	
RB	4,313,013	01/26/82	Harris	585	818	
RB	4,468,235	08/28/84	Hill	55	16	
RB	4,496,373	01/29/85	Behr et al.	55	16	
RB	4,536,196	08/20/85	Harris	55	16	
RB	4,589,891	05/20/86	Iniotakis	55	158	
RB	4,689,150	08/25/87	Abe et al.	210	490	
RB	4,699,637	10/13/87	Iniotakis	55	158	
RB	4,810,485	03/07/89	Marianowski	423	648.1	
RB	4,857,080	08/15/89	Baker et al.	55	16	
RB	5,139,541	08/18/92	Bend	55	16	
RB	5,149,420	09/22/92	Buxbaum	205	219	
RB	5,171,822	12/15/92	Pater	528	188	
RB	5,215,729	06/01/93	Buxbaum	423	248	
RB	5,217,506	06/08/93	Bend	55	16	
RB	5,259,870	11/09/93	Bend	95	56	
RB	5,332,597	07/26/94	Carolan et al.	427	243	
RB	5,366,712	11/22/94	Violante et al.	423	248	
RB	5,393,325	02/28/95	Bend	95	56	
RB	5,498,278	03/12/96	Edlund	96	11	
RB	5,518,530	05/21/96	Sakai et al.	96	11	
RB	5,614,001	03/25/97	Kosake et al.	96	10	
RB	5,645,626	07/08/97	Edlund et al.	95	56	
RB	5,652,020	07/29/97	Collins et al.	427	230	
RB	5,674,301	10/07/97	Sakai et al.	48	61	
RB	5,738,708	04/14/98	Peachey et al.	95	56	
RB	5,821,185	10/13/98	White et al.	502	4	
RB	5,931,987	08/03/99	Buxbaum	95	55	
RB	5,980,989	11/09/99	Takahashi et al.	427	294	
RB	6,037,514	03/14/00	White et al.	585	520	
RB	6,066,592	05/23/00	Kawae et al.	502	439	
RB	6,183,543	02/06/01	Buxbaum	96	11	
RB	6,214,090	04/10/01	Dye	95	56	
RB	6,235,417	05/22/01	Wachsman et al.	429	17	
RB	6,281,403	08/28/01	White et al.	585	658	
RB	6,296,687	10/02/01	Wachman	95	55	
RB	6,350,297	02/26/02	Doyle	95	55	
RB	6,461,408	10/08/02	Buxbaum	95	55	
RB	6,475,268	11/05/02	Thornton	96	11	
RB	6,478,853	11/12/02	Hara et al.	95	56	
RB	6,547,858	04/15/03	Edlund et al.	96	4	
RB	6,569,226	05/27/03	Dorris et al.	95	56	

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Form PTO-1449 APR 23 2004	ATTY DOCKET NO. 63-03	SERIAL NO. 10/717,218	FILING DATE November 19, 2003
APPLICANT Rask et al.			GROUP 1724

R45	2003/0000387	01/02/03	Uemura	96	11	
R45	2002/0062738	05/30/02	Yoshida	96	11	
R45	2002/0020298	02/21/02	Drost et al.	96	11	

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Document Number	Date	Country	Class	Subclass	Translation Yes/No

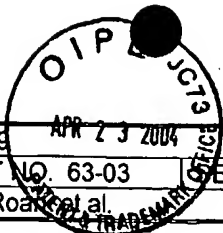
OTHER PRIOR ART (including Author, Title, Date, Pertinent Pages, etc.)

R45		Amandusson, H. Dissertation No.651, "Hydrogen Extraction with Palladium Based Membranes," Institute of Technology, Linkopings Universitet, Department of Physics and Measurement Technology, Linkoping, Sweden, (Forum Scientum, Linkoping, Sweden, 2000).
R45		Balachandran, U.; Lee, T. H.; Dorris, S. E., "Development of Mixed-Conducting Ceramic Membrane for Hydrogen Separation," In <i>Sixth International Pittsburgh Coal Conference</i> : Pittsburgh, PA, 1999.
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R45		Beshers, D. N. (1973) "Diffusion of Interstitial Impurities," in: "Diffusion," (American Society for Metals, Metals Park, Ohio) pp. 209-240.
R45		Bonanos, N. et al., "Ionic Conductivity of Gadolinium-Doped Barium Cerate Perovskites," <i>Solid State Ionics</i> 1989, 35, 179-188.
R45		Bonanos, N. "Transport properties and conduction mechanism in high-temperature protonic conductors," <i>Solid State Ionics</i> 1992, 53-56, 967-974.
R45		Bonanos, N. "Transport Study of the Solid Electrolyte BaCe _{0.9} Gd _{0.1} O _{2.95} at High Temperatures," <i>J. Phys. Chem. Solids</i> 1993, 54, 867-870.
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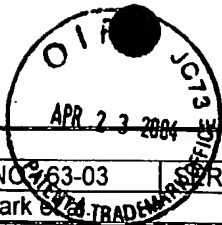
Form PTO-1449	APR 23 2004		
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RHS		Kroger, F. A. "Detailed Description of Crystalline Solids; Imperfections," <i>The Chemistry of Imperfect Crystals</i> ; Chapter 7, North Holland Publishing Co.: Amsterdam, 1964, pp 192-207.
RHS		Lee, W.; Nowick, A. S. "Protonic Conduction in Acceptor-Doped KTaO ₃ Crystals," <i>Solid State Ionics</i> 1986, 18/19, 989-993.
RHS		Liang, K. C.; Nowick, A. S. "High-temperature protonic conduction in mixed perovskite ceramics," <i>Solid State Ionics</i> 1993, 61, 77-81.
RHS		Lunden, A.; Mellander, B.-E.; Zhu, B. "Mobility of Protons and Oxygen Ions in Lithium Sulfate and Other Oxyacid Salts," <i>Acta. Chem. Scand.</i> 1991, 45, 981-982.
RHS		Munch, W.; et al., "A quantum molecular dynamics study of proton conduction phenomena in BaCeO ₃ ," <i>Solid State Ionics</i> 1996, 86-88, 647-652.
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RHS		Nishimura, C. et al., "Hydrogen Permeation Characteristics of Vanadium-Nickel Alloys," <i>M. Mat. Trans.</i> 1991, 32, 501-507.
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RHS		Norby, T.; Larring, Y. "Mixed hydrogen ion-electronic conductors for hydrogen permeable membranes," <i>Solid State Ionics</i> 2000, 136-137, 139-148.
RHS		Norby, T.; Larring, Y., "Concentration and Transport of Protons and Oxygen Defects in Oxides," In <i>Ceramic Oxygen Ion Semiconductors and Their Applications</i> ; Steele, B. C. H., Ed.; The Institute of Materials, 1996, pp 83-93
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APPLICANT Roark & Co. TRADEMARK		GROUP 1724

RHS		Siriwardane, R. V. Jr., et al., "Characterization of ceramic hydrogen separation membranes with varying nickel concentrations," <i>Appl. Surf. Sci.</i> 2000 , <i>167</i> , 34-50.
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RHS		Takekoshi, T., "Synthesis of Polyimides," (1996) <i>Polyimides Fundamentals and Applications</i> , Chapter 2, (Marcel Dekker, Inc., New York, New York), pp. 7-44.
RHS		Van der Merwe, J.H. (1984) "Recent Developments in the Theory of Epitaxy," in: "Chemistry and Physics of Solid Surfaces V," Edited by R. Vanselow and R. Howe, Springer-Verlag, Berlin, 1984) pp. 365-401.
RHS		Yajima, T.; Iwahara, H. "Studies on behavior and mobility of protons in doped perovskite-type oxides: (I) In situ measurement of hydrogen concentration in $\text{SrCe}_{0.95}\text{Yb}_{0.05}\text{O}_{3-\alpha}$ at high temperature," <i>Solid State Ionics</i> 1992 , <i>50</i> , 281-286.
RHS		Yajima, T. et al. "Proton conduction in sintered oxides based on CaZrO_3 ," <i>Solid State Ionics</i> 1991 , <i>47</i> , 271-275.
RHS		Yamakawa, K. et al., "Hydrogen permeability measurement through Pd, Ni and Fe membranes," <i>J. Alloys and Compounds</i> May 2001 , <i>321</i> , 17-23.
RHS		Zhang, Y. et al., "Hydrogen permeation characteristics of vanadium-aluminium alloys," <i>Scripta Materialia</i> November 2002 , <i>47</i> , 601-606.
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RHS		Zhu, B. et al. "Structure and ionic conductivity of lithium sulphate-aluminum oxide ceramics," <i>Solid State Ionics</i> 1994 , <i>70/71</i> , 125-129.
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RHS		Zhu, B.; Mellander, B.-E., "Ionic Conductivities of Nitrate-Based Oxide Materials for Solid State Fuel Cells," In <i>High Temperature Electrochemical Behavior of Fast Ion and Mixed Conductors</i> ; Poulsen, F. W., Bentzen, J. J., Jacobson, T., Skou, E., Ostergard, M. J. L., Eds.: Roskilde, 1993 , p 495
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RHS		Zhu, B. "Applications of hydrofluoride ceramic membranes for advanced fuel cell technology," <i>Int. J. Energy Res.</i> 2000 , <i>24</i> , 39-49
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Sheet 1 of 2

Substitute for form 19/PTO, based on PTO/SB/08A and 08B INFORMATION DISCLOSURE STATEMENT BY APPLICANT	Application Number	10/717,218
	Filing Date	November 19, 2003
	First Named Inventor	Roark
	Art Unit	1724
	Examiner Name	Spitzer, Robert H.
	Attorney Docket Number	63-03

U.S. PATENT DOCUMENTS

Examiner Initial*	Cite No. ¹	Document Number (US-)	Publication Date (MM-DD-YYYY)	Name	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear (or entire document unless noted otherwise)
RHS		3,246,450	04/19/66	Stern et al.	
RHS		4,804,475	02/14/89	Sirinyan et al.	
RHS		6,152,987	11/28/00	Ma et al.	
RHS		6,187,157	02/13/01	Chen et al.	
RHS		6,379,514	04/30/02	Schulte et al.	
RHS		6,572,683	06/03/03	Yoshida et al.	
RHS		6,641,647	11/04/03	Uemura et al.	
RHS		6,649,559	11/18/03	Drost et al.	

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NON-PATENT LITERATURE DOCUMENTS

Examiner Initial"	Cite No. ¹	REFERENCE	T ²
		Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	
RHS		Buxbaum, R.E. and Kinney, A.B. (1996), "Hydrogen Transport through Tubular Membranes of Palladium-Coated Tantalum and Niobium," Ind. Eng. Chem. Res. 35:530-537	
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Examiner Signature	Robert H. Spitzer	Date Considered	Nov. 16, 2004
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